

IN THE SPECIFICATION

The paragraph beginning at page 12, line 1 has been amended as follows:

In a heart-operating mode of the tomography device 1 according to the invention, raw data are acquired by both acquisition systems. In this mode, the second measurement field 35 is scanned with increased temporal resolution and/or with increased data rate in comparison to a device with only one acquisition system. The first detector 13 is thereby used only with a length $L1'$ (shortened in comparison to its overall length $L1$) that is substantially identical to the length $L2$ of the smaller detector 17. The x-ray radiation incident in the annular region between the two borders of the measurement fields 31, 35 thus possibly passes the patient 5 unused. As needed, it may be, of advantage to adjust the current fan angle $2\beta_1$ of the first acquisition system in the heart operating mode to a value smaller than the maximum fan angle $2\beta_{1max}$ of the first acquisition system, in particular identical to the maximum fan angle $2\beta_{2max}$ of the second acquisition system. Corresponding edge rays are indicated in Figure 2.

The paragraph beginning at page 13, line 5 has been amended as follows:

In Figure 3, a further feature of the tomography device 1 is shown. It concerns the azimuthal separation of the two acquisition systems (indicated in Figure 3 with the angles γ_1, γ_2 and α , or, formulated differently, the azimuthal separation of two arbitrary detector elements of the detectors 13 or 17. In Figure 3, the equidistant detector pitch (identical for both acquisition systems) or the identical, equidistant element separation $\Delta\beta$ is indicated.

The paragraph beginning at page 13, line 11 has been amended as follows:

The position of each of the acquisition systems is defined in the following by an imaginary connecting line "first focus of the first radiator 11 – rotation center on the rotation axis 9" or "second focus of the ~~first~~ second radiator 15 – rotation center on the rotation axis 9". In the example, these lines are identical to the middle rays 23 or 27 (Figure 2).

The paragraph beginning at page 14, line 4 has been amended as follows:

With regard to the individual detector elements, an analogous installation rule can be established. For this,

γ_4 ~~γ_4~~ the angular position of an arbitrary detector element 13a, 13b, 13c, ... of the first detector 13, measured at the first focus between the imaginary connecting line "first focus – rotation center" and an imaginary connecting line "first focus – detector element 13a, 13b, 13c, ...", and

γ_2 ~~γ_2~~ the angular position of an arbitrary detector element 17a, 17b, 17c, ... of the first detector 17, measured at the second focus between the imaginary connecting line "second focus – rotation center" and an imaginary connecting line "second focus – detector element 17a, 17b, 17c, ...".

The paragraph beginning at page 14, line 18 has been amended as follows:

Both detectors 13, 17 are installed such that the difference $\gamma_4 - \gamma_2$ ~~$\gamma_1 - \gamma_2$~~ of the two angular positions γ_4, γ_2 ~~γ_1, γ_2~~ is a whole-number, odd multiple $2N+1$ of the half element separation $\Delta\beta$: